

**Remarks by the Honorable Frederick Gregory
NASA Deputy Administrator
NATO Research and Technology Organization
Board Meeting
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Thank you Congressman Grover (Grover Hall, Vice President Technical Operations, Lockheed Martin) for that very generous introduction and good afternoon everyone.

I usually begin my talks by saying what an honor it is to be given the opportunity to speak before you. In this case, I am not exaggerating in saying I could think of no better audience, than my colleagues at NATO, to present my last official address as a senior representative at NASA.

I can also think of no better place than here in Colorado Springs to make my valedictory address. For it was here 45 years ago as an Air Force Academy cadet I began to train for a life of service to my country. I truly have come full circle, and it's been a great ride every step of the way.

In thinking back to those days as a cadet, one of my indelible memories from my junior year was sitting in the stands at the Academy's brand new football stadium, some 15 miles north of here, and listening to a young President named John Kennedy address the graduating class of 1963.

I looked up a copy of President Kennedy's speech the other day, and it was remarkable how much his words spoke to the role that we as professional airmen, and that great organizations such as NATO, would play in the decades ahead to help defend freedom throughout the world and keep the

peace through what he called the “long twilight struggle with communism.”

Referring to the Cuban missile crisis, which took place the prior October, Kennedy said the following:

“We needed in October—and we had them and we shall need them in the future, military commanders who are conscious of the enormous stakes in the nuclear age of every decision that they take, who are aware of the fact that there are no purely political decisions or purely military decisions....that every problem is a mixture of both, men who know the difference between vital interests and peripheral interests, who can maneuver military forces with judgment and precision, as well as courage and determination, and who can foresee the effects of military action on political policy.”

Throughout my career I have had many opportunities to see the wisdom of President Kennedy's remarks, and I commend NATO for its pivotal role over your 56 year history in exercising the judgment Kennedy spoke of. NATO was a vital organization throughout the Cold War, continued to be so when civilization had to confront a new challenge in the former Yugoslavia, and remains so today as we deal with the challenges of organized global terrorism.

I am most proud that among my duties as Deputy Administrator was to serve as the NASA representative to this organization. I thank you from the bottom of my heart for this great honor.

Now as I prepare to take leave from the world's greatest space agency that I have served for 31 amazing years, I must tell you that I've never been as proud of the work that NASA conducts and hopeful about the future of the space program as I am today.

Through our Vision for Space Exploration, the bold plan to employ astronaut pioneers and robotic pathfinders in opening up the solar system to the expansion of human civilization, NASA has a challenge worthy of our nation's questing spirit.

It is also an exploration program, that as President Bush has said, will enhance America's long-term economic, scientific and security interests.

On this latter matter, let me suggest a couple of ways in which our exploration agenda will be good for American security and our collective security.

Just as the Apollo moon landing program inspired the youth of America to pursue exciting careers in scientific and engineering fields, so we believe our bold program to set up base camps on the moon, Mars and beyond will inspire a new generation of scientists, engineers and astronauts, many of whom will also work for the armed services or companies that support the nation's defense.

Second, to successfully implement our Vision, we will need to accelerate development of a number of cutting edge technologies, all of which are useful for national security purposes.

I'm confident that NASA will be at the forefront in advances in robotics, autonomous and fault tolerant systems, human-machine interface, materials, life support systems and novel applications of micro devices.

If history is any guide, these and other technologies we develop will have a tremendous impact on human society in numerous beneficial and unanticipated ways.

Our new mission, under the Vision for Space Exploration the President Bush presented nearly two years ago, requires us to focus our efforts on an achievable, practical plan to move beyond the space shuttle, with new launch and cargo carrying vehicles, into a new era of exploration activities beyond low Earth orbit, something I'd always hoped we'd be doing.

Indeed, we're giving the brave men and women who fly in our spacecraft a mission worthy of the risks we take on when people like me volunteer for the astronaut program.

We will go back to the moon, as early as 13 years from now. And shortly thereafter, I believe people around the globe will be able to look up at a darkened Moon, and with the aide of a strong telescope, be able to see the glimmering lights of a research station on the lunar surface manned by an international crew.

At this research station, pioneering astronauts be learning how to convert lunar material into useful resources such as oxygen and methane for the fuel that will enable the first expeditions to Mars.

A necessary step in helping us get back to the moon is to fully utilize the research potential of the International Space Station, to help us master the tasks, and address the human health hazards that human crews will face during extensive expeditionary activities on the lunar surface.

Making full use of the International Space Station is a goal I have worked very hard to accomplish through my participation on the International Space Station Multinational Partnership Council.

Another important element of our space plans for the future is that we want to encourage our partner nations, many of whom are members of NATO, to participate in this extraordinary exploration adventure.

In presenting the Vision for Space Exploration nearly two years ago, President Bush made clear that while he was determined to carry out the pioneering tradition the American people hold dear in our hearts, this new journey would involve intensive international cooperation.

The President stated, “We’ll invite other nations to share the challenges and opportunities of this new era of discovery. The vision I outline today is a journey, not a race, and I call on other nations to join us on this journey, in a spirit of cooperation and friendship.”

Already, to help promote future partnerships on Vision enabling activities, NASA has hosted well-attended international workshops focusing on opportunities for collaboration in the development of exploration systems, and in space science.

The goals we have developed for international cooperation are two-fold. First, we hope to promote common space exploration objectives and cooperative or complementary space exploration missions.

Second, we want to join with other nations in developing breakthrough technologies that will open up many opportunities for exploration and discovery.

As we move forward on our long term exploration program, we believe the tools that will get us there, a new generation of space craft and launch vehicles, will help us achieve our nation's space exploration goals in a manner that is both cost-effective and efficient, and which complements our defense national space launch requirements.

These plans fit within NASA's available budget of just seven tenths of one percent of the federal budget, and envision timely progress in reaching our space exploration goals.

Since we are out in Colorado Springs, a place well steeped in America's frontier heritage of exploration and discovery, I'd like to put the hard work of space exploration in a broader focus.

The American people have always had the ability to look beyond the challenges of the present day with optimism and hope, and make long-term investments in the future well being of our society.

The space program is such an investment. It is our seed corn for a future that will realize amazing technological developments and an expansion of our civilization and culture throughout the solar system.

We also know from the evidence of history that those nations that have made a sustained commitment to exploration have prospered in the long run. Many of the NATO member nations can proudly relate the role that exploration has played in their history, both materially and culturally.

Today, some in our country suggest that we deal with our pressing national responsibilities by cutting back on the space program.

I frankly do not believe we need to consider ceding our leadership in space, any more that our country had to consider giving up on the promise of aviation 99 years ago following the San Francisco earthquake, or abandon the moon landing program in 1969, following the devastation on the Gulf Coast of another Hurricane called Camille.

When this nation makes a steady investment in the space program we support pioneering exploration activities that will fuel creativity, innovation and technology development.

And for those who think we don't have the will to move forward, I think it is worthwhile to note that in public opinion polling, a strong majority of our public supports the goals of this program. This popular support is reflected in the fact that huge majorities of both houses of our Congress have voted to fund the program that President Bush has laid out.

In the months and years ahead I'm confident we will achieve steady progress in reaching our exploration objectives--one mission, one voyage, and one landing at a time.

Finally, I'm convinced that in the ways we are attacking the challenges presented by the Vision we are setting the stage for a space program that will increase the opportunities we will all share to become a smarter, safer, healthier and more intelligent world.

And if we do it right, we can do it together, on a scale never seen before in the history of the planet, at a pace hardly thought possible.

Once again I thank you for the opportunity to speak to this distinguished gathering on behalf of some of the finest scientists and engineers in the world, the men and women of NASA.

And I thank you from the bottom of my heart for
this wonderful chance to conclude my career on a
note as high as the majestic mountain, Pike's Peak,
that looms over this great city.